

V.A.5.N.d. Medium-tall bunch temperate or subpolar grassland

V.A.5.N.d.402. AGROPYRON CRISTATUM SEMI-NATURAL HERBACEOUS ALLIANCE

Crested Wheatgrass Semi-natural Herbaceous Alliance

AGROPYRON CRISTATUM - (PASCOPYRUM SMITHII, HESPEROSTIPA COMATA) SEMI-NATURAL HERBACEOUS VEGETATION

Crested Wheatgrass - (Western Wheatgrass, Needle-and-Thread) Semi-natural Herbaceous Vegetation

ELEMENT CONCEPT

GLOBAL SUMMARY: This crested wheatgrass type occurs most commonly in the northern Great Plains of the United States and Canada. Stands occur in a wide variety of human-disturbed habitats, including highway rights-of-way, jeep trails, etc. It is also widely planted to revegetate pastures and rangelands. The vegetation is dominated by medium-tall (0.5-1 m) graminoids. The dominant grass is *Agropyron cristatum*, a naturalized species from Europe. Other weedy species may occur as well, but native species are generally less than 10% cover. Native species may include mixed-grass prairie grasses, such as *Pascopyrum smithii* and *Hesperostipa comata* (= *Stipa comata*), as well as others. Where native species are conspicuous enough to identify the native plant association that could occupy the site, the stand should be typed as such.

ENVIRONMENTAL DESCRIPTION

USFWS Wetland System: Upland

Florissant Fossil Beds NM Environment: Two small, nearly pure stands of this herbaceous vegetation were observed in the monument. The larger stand is dominated by *Agropyron cristatum* and occurs as a nearly pure stand on the edge of a swale in the northeastern corner of the monument. This stand occupies the margins of an active prairie dog colony and is heavily grazed. A smaller stand was observed near the western monument boundary, south of the water pipeline. Elsewhere, *Agropyron cristatum* was included in a seed mix with, and is subdominant to, *Bromus inermis* and was used to revegetate ground disturbed by historic water pipeline construction and seed potato agricultural fields. The species may also have been planted to attempt to enhance forage production for livestock and to provide erosion control.

Global Environment: This type can occur in a wide variety of human-disturbed habitats, including highway rights-of-way, jeep trails, etc. It is also widely planted to revegetate pastures and rangelands.

VEGETATION DESCRIPTION

Florissant Fossil Beds NM Vegetation: This exotic grassland is characterized by an almost pure stand of *Agropyron cristatum*, a medium-tall bunchgrass providing approximately 55% vegetative cover and standing less than 0.5 m in height. The litter layer is dense, although the clumps were widely enough spaced to expose nearly 30% bare soil and gravel surfaces. Only a few small stands and patches occurred as near mono-cultures within the monument, and these were located on dry ridges and slopes of Pikes Peak granite gravel and silty clay soil that had been disturbed historically by ranching and farming activities. Native species found within these stands are all disturbance-oriented and include *Artemisia frigida*, *Grindelia subalpina*, and *Oenothera coronopifolia*.

Global Vegetation: The vegetation is dominated by medium-tall (0.5-1 m) graminoids. The dominant grass is *Agropyron cristatum*, a naturalized species from Europe. Other weedy species may occur as well, but native species are generally less than 10% cover. Native species may include mixed-grass prairie grasses, such as *Pascopyrum smithii* and *Hesperostipa comata* (= *Stipa comata*), as well as others.

Global Dynamics:

MOST ABUNDANT SPECIES

Florissant Fossil Beds NM

Stratum

Dwarf-shrub

Graminoid

Forb

Species

Artemisia frigida

Agropyron cristatum, *Pascopyrum smithii*, *Nassella viridula*, *Bouteloua gracilis*

Grindelia subalpina, *Oenothera coronopifolia*, *Linaria vulgaris*

Global

Stratum

Graminoid

Species

Agropyron cristatum

CHARACTERISTIC SPECIES

Florissant Fossil Beds NM

Stratum

Graminoid

Forb

Species

Agropyron cristatum, *Pascopyrum smithii*, *Nassella viridula*

Artemisia frigida

Global

Stratum

Graminoid

Species

Agropyron cristatum, *Pascopyrum smithii*

OTHER NOTEWORTHY SPECIES

Florissant Fossil Beds NM

Global

Stratum

Species

GLOBAL SIMILAR ASSOCIATIONS:

GLOBAL STATUS AND CLASSIFICATION COMMENTS

Global Conservation Status Rank: GW.

Global Classification Comments: Where native species are conspicuous enough to identify the native plant association that could occupy the site, the stand should be typed as such.

ELEMENT DISTRIBUTION

Florissant Fossil Beds NM Range: This semi-natural herbaceous vegetation is represented well at two sites. The first is located along the trail that leads to the northeastern corner of the monument, where the purest stand of *Agropyron cristatum* occurs approximately 200 m from the northern boundary fenceline. The second is represented south of the water pipeline corridor, near the western monument boundary.

Global Range: This type occurs most commonly in the northern Great Plains of the United States and Canada.

Nations: CA US

States/Provinces: MB MT ND SD SK WY

ELEMENT SOURCES

Florissant Fossil Beds NM Inventory Notes: *Pascopyrum smithii* is reported to be planted at FLFO.

Classification Confidence: 3 **Identifier:** CEG005266

REFERENCES: Hansen et al. 1984